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News Summary

Articles on inside pages

Higher education could still face a tough battle for federal funds if the Democrats take control of the Senate next year. Story on Page 24.

Lobbyists for colleges and universities say dealing with state legislatures isn't as simple as it used to be. Story on Page 25.

Most Catholic seminaries in the United States are "generally satisfactory," according to a report to the Vatican. Story on Page 2.

David McLaughlin announced his resignation as president of Dartmouth College. Story on Page 3.

"Neural networks" help scientists study the brain by modeling the way neurons work. Story on Page 6.

Faculty members at Indiana University are taking physics classes to try to discover why students find the subject so difficult. Story on Page 18.

The plunge in the price of crude oil has had a pronounced effect on the charitable giving of petroleum companies. Story on Page 39.

Efforts to make colleges accountable for what students learn are trivializing the baccalaureate degree, Ernest Boyer said last week. Story on Page 41.

The University of Akron is entering big-time college sports with the hiring of Gerry Faust, former football coach at the University of Notre Dame. Story on Page 45.

Military forces have moved onto the campus of South Africa's University of Fort Hare to try to end a boycott of classes. Story on Page 49.

ALSO IN THIS ISSUE

Athletics	45-48
Books	14-18, 20
Bulletin Board	62-103
Calendar of Events	55-60
Computers	21
Deadlines	60-61
Deaths	55
Gazette	55
Government & Politics	24-37
Grants	36-37, 40
Ideas	22
International	49-51
Letters & Opinion	52-54
Personal & Professional	18-22
Philanthropy	39-40
Scholarship	6-18
Students	41-44

BOOSTING U.S. COMPETITIVENESS

White House Pushing Campus Centers for Interdisciplinary Science Research

By KIM McDONALD
WASHINGTON

Federally sponsored university research centers that bring together scientists from a variety of disciplines to work on problems of interest to American industry are being promoted by the Reagan Administration as an effective way to improve the country's scientific and industrial competitiveness.

Top scientists in the Administration, who have been trying in the past year to increase the number and scope of the centers, say the creation of more such facilities would not only stimulate greater industrial support of and participation in university research, but also help break down the institutional barriers that now make it difficult for researchers in different university departments to work together.

By concentrating resources and talent at specific universities, those scientists argue, such centers would make the most efficient use of federal research support to stimulate new advances. And by working closely with industry, they say, the centers would improve the transfer of fundamental research developments to companies and provide students with the type of training relevant for careers in industry.

Closed-Door Sessions

The idea for their development came from closed-door meetings last year in which White House science officials were told by science leaders from universities and industry that advances in many areas of science and technology, such as biotechnology, increasingly required the

Continued on Page 8, Column 1

Education Secretary Calls for Fundamental Changes in Colleges; ACE President Hits 'Guns over Butter'

Bennett

CAMBRIDGE, MASS.

Education Secretary William J. Bennett last week warned colleges and universities that unless they make some fundamental changes both in the way they teach their students and in their tactics for seeking aid in Washington, public support could wane in the years to come.

"There is an extraordinary gap between the rhetoric and the reality of American higher education," said Mr. Bennett. "The gap is so wide in fact, that we face the real possibility—not today, perhaps not tomorrow, but someday—of an erosion of public support for the enterprise."

In a wide-ranging speech prepared for delivery at Harvard University, Mr. Bennett sharply attacked college lobbyists in Washington, who he said care about little more than obtaining federal dollars for their institutions.

"I have never seen a greater interest

Continued on Page 27, Column 1

Atwell

SAN FRANCISCO

Robert H. Atwell, president of the American Council on Education, accused the Reagan Administration last week of encouraging an "unregulated pursuit of self-interest" in the United States and of making a "diminished commitment to investing in the overall social good."

"By defining the common good as national defense, this Administration has rationalized abandoning those unable to compete and has chosen guns over butter," Mr. Atwell said.

He made the charges in a speech to nearly 1,000 college and university administrators at the council's annual meeting here. They responded with prolonged applause.

As head of higher education's "umbrella" organization, Mr. Atwell also used the occasion to warn campus leaders that competitive forces within academe were getting "out of hand" and causing "a public

Continued on Page 26, Column 1

University Unrest Curbed in Chile by State of Siege

Students and professors vow to restore campus democracy

SANTIAGO

A state of siege imposed after a failed assassination attempt against Gen. Augusto Pinochet appears to have quelled, at least for the moment, what had been a rising tide of student and faculty unrest at Chile's universities.

Student leaders and professors say, however, that the superficial quiet on their campuses masks continuing efforts to force through measures to make the universities more democratic and to undo the effects of years of strict control by General Pinochet's government.

Students have vowed to defy a government ban on elections for student federations, and faculty members are pushing for the replacement of government-appointed administrators and deans with those chosen democratically.

The state of siege, introduced only days before the 13th anniversary of the September 11, 1973 coup d'état that brought General Pinochet's regime to power, is widely viewed by students and professors as an attempt to silence mounting opposition rather than root out those responsible for the ambush in which five of the Chilean President's bodyguards were killed.

"If Pinochet intended to intimidate us, he has—no doubt—achieved his goal," Tomás Jocelyn Holtz, leader of the student federation at the Catholic University of Chile in Santiago, said last week.

"Students have been badly hit by the

Continued on Page 51, Column 1

Unesco's Director-General Will Not Seek 3rd Term

Amadou Mahtar M'Bow, the Director-General of Unesco, who has drawn sharp criticism in the West, said last week that he would step down next year. Story on Page 49.

Have You Heard the One About the Traveling Comedian?

By THOMAS J. MEYER
ON INTERSTATE 55, IN ILLINOIS

When he's driving alone between campuses late at night, sometimes Alex Cole pulls his Cadillac Cimmaron over to the roadside, flips on a Jerry Lee Lewis tape at full volume, and dances in front of the headlights.

Sometimes, when he's traveling in the Midwest, he sets each of the car radio's pre-set buttons to tune in a different baseball announcer, and follows five ball games at the same time. If one of his favorite teams is playing, he pulls the team's cap out of the back seat and puts it on his head.

Alex Cole is manic 24 hours a day.

Once he brought a chair, a lamp, and a table into an empty hotel elevator and sat down. On each floor, when the doors opened and people tried to enter, he yelled, "Get out of here! This is *my* room!"

He spends most of his time on the road trying to entertain himself. But every night, Mr. Cole, a 31-year-old stand-up co-

Continued on Page 43, Column 1

Alex Cole: "I spend my life driving. But an hour a day, I get a microphone, I get a spotlight on me, I get a crowd, I get laughs. What more could I ask for?"

CHRONICLE PHOTOGRAPH BY THOMAS J. MEYER

FACT–FILE

Fall 1985 Enrollment

By type and control of institution

	All students			Full-time students			Part-time students		
Public institutions	Total	Men	Women	Total	Men	Women	Total	Men	Women
Doctoral	2,400,817	1,241,164	1,159,653	1,813,810	968,114	845,696	587,007	273,050	313,957
Comprehensive	2,206,206	1,017,892	1,188,314	1,427,475	691,703	735,772	778,731	326,189	452,542
General baccalaureate	396,413	183,479	212,934	237,966	115,669	122,297	158,447	67,810	90,637
Specialized	197,979	129,561	68,418	160,108	111,677	48,431	37,871	17,884	19,987
2-year	4,249,048	1,850,456	2,398,592	1,465,320	710,375	754,945	2,783,728	1,140,081	1,634,647
New*	28,810	14,936	13,874	15,567	8,824	6,743	13,243	6,112	7,131
All	9,479,273	4,437,488	5,041,785	5,120,246	2,606,362	2,513,884	4,359,027	1,831,126	2,527,901
Private institutions									
Doctoral	632,565	346,318	286,247	467,309	264,650	202,659	165,256	81,668	83,588
Comprehensive	657,004	325,569	331,435	419,516	211,342	208,174	237,488	114,227	123,261
General baccalaureate	759,927	330,271	429,656	570,472	258,513	311,959	189,455	71,758	117,697
Specialized	387,101	218,409	168,692	251,426	152,782	98,644	135,675	65,627	70,048
2-year	260,293	111,814	148,479	204,314	90,174	114,140	55,979	21,640	34,339
New*	70,892	48,581	22,311	41,938	23,897	18,041	28,954	24,684	4,270
All	2,767,782	1,380,962	1,386,820	1,954,975	1,001,358	953,617	812,807	379,604	433,203
All institutions									
Doctoral	3,033,382	1,587,482	1,445,900	2,281,119	1,232,764	1,048,355	752,263	354,718	397,545
Comprehensive	2,863,210	1,343,461	1,519,749	1,846,991	903,045	943,946	1,016,219	440,416	575,803
General baccalaureate	1,156,340	513,750	642,590	808,438	374,182	434,256	347,902	139,568	208,334
Specialized	585,080	347,970	237,110	411,534	264,459	147,075	173,546	83,511	90,035
2-year	4,509,341	1,962,270	2,547,071	1,669,634	800,549	869,085	2,839,707	1,161,721	1,677,986
New*	99,702	63,517	36,185	57,505	32,721	24,784	42,197	30,796	11,401
All	**12,247,055**	**5,818,450**	**6,428,605**	**7,075,221**	**3,607,720**	**3,467,501**	**5,171,834**	**2,210,730**	**2,961,104**

By student level

Undergraduates									
Doctoral institutions	2,094,738	1,087,728	1,007,010	1,799,134	946,153	852,981	295,604	141,575	154,029
Comprehensive	2,175,200	1,039,286	1,135,914	1,684,363	818,253	866,110	490,837	221,033	269,804
General baccalaureate	993,686	445,539	548,147	781,248	359,611	421,637	212,438	85,928	126,510
Specialized	342,778	205,052	137,726	276,008	173,101	102,907	66,770	31,951	34,819
2-year	3,722,108	1,636,456	2,085,652	1,571,521	751,684	819,837	2,150,587	884,722	1,265,815
New*	85,564	56,013	29,551	50,117	27,918	22,199	35,447	28,095	7,352
All	9,414,074	4,470,074	4,944,000	6,162,391	3,076,720	3,085,671	3,251,683	1,393,354	1,858,329
First-time freshmen									
All	2,292,222	1,075,736	1,216,486	1,602,038	774,858	827,180	690,184	300,878	389,306
Graduate students									
Doctoral institutions	600,228	325,960	274,268	327,090	192,084	135,006	273,138	133,876	139,262
Comprehensive	381,945	170,448	211,497	86,932	43,496	43,436	295,013	126,952	168,061
General baccalaureate	37,809	16,284	21,525	7,197	3,911	3,286	30,612	12,373	18,239
Specialized	101,662	59,895	41,767	46,672	28,795	17,877	54,990	31,100	23,890
2-year	3,577	2,630	1,047	534	245	289	3,143	2,385	758
New*	4,217	2,007	2,210	2,542	1,288	1,254	1,675	719	956
All	1,129,538	577,224	552,314	470,967	269,819	201,148	658,571	307,405	351,166
First professional									
Doctoral institutions	129,508	81,100	48,408	121,962	76,771	45,191	7,546	4,329	3,217
Comprehensive	40,438	25,162	15,276	33,670	21,029	12,641	6,768	4,133	2,635
General baccalaureate	7,709	5,320	2,389	6,314	4,317	1,997	1,395	1,003	392
Specialized	93,088	65,788	27,300	81,783	58,199	23,584	11,305	7,589	3,716
New*	3,457	2,422	1,035	2,890	2,052	838	567	370	197
All	274,200	179,792	94,408	246,619	162,638	84,251	27,581	17,424	10,157
Unclassified									
All	1,429,243	591,360	837,883	195,244	98,813	96,431	1,233,999	492,547	741,452

By state

	Public institutions	Private institutions	Total
Alabama	158,688	20,655	179,343
Alaska	26,510	969	27,479
Arizona	202,036	14,818	216,854
Arkansas	66,123	11,835	77,958
California	1,444,207	206,232	1,650,439
Colorado	142,031	19,283	161,314
Connecticut	98,616	60,732	159,348
Delaware	27,933	3,950	31,883
District of Columbia	12,747	66,121	78,868
Florida	362,241	89,151	451,392
Georgia	148,956	47,870	196,826
Hawaii	43,246	6,691	49,937
Idaho	33,666	9,002	42,668
Illinois	520,224	158,465	678,689
Indiana	193,833	56,734	250,567
Iowa	109,765	43,132	152,897
Kansas	127,220	14,139	141,359
Kentucky	110,836	30,888	141,724
Louisiana	153,173	24,003	177,176
Maine	33,188	19,013	52,201
Maryland	198,992	32,657	231,649
Massachusetts	185,602	235,573	421,175
Michigan	434,270	73,023	507,293
Minnesota	173,984	47,178	221,162
Mississippi	90,704	10,476	101,180
Missouri	168,829	72,317	241,146
Montana	32,032	3,926	35,958
Nebraska	81,202	16,567	97,769
Nevada	43,368	288	43,656
New Hampshire	26,669	25,614	52,283
New Jersey	237,297	60,361	297,658
New Mexico	66,059	2,236	68,295
New York	563,251	436,847	1,000,098
North Carolina	267,044	60,244	327,288
North Dakota	34,802	3,137	37,939
Ohio	379,164	135,581	514,745
Oklahoma	146,827	22,346	169,173
Oregon	119,612	18,355	137,967
Pennsylvania	300,523	232,675	533,198
Rhode Island	35,389	34,538	69,927
South Carolina	105,854	26,048	131,902
South Dakota	23,339	9,433	32,772
Tennessee	147,951	46,894	194,845
Texas	677,192	92,500	769,692
Utah	69,426	34,568	103,994
Vermont	18,844	12,572	31,416
Virginia	250,754	41,662	292,416
Washington	201,532	30,021	231,553
West Virginia	66,531	10,128	76,659
Wisconsin	238,735	36,334	275,069
Wyoming	24,204	0	24,204
U.S. Service Schools	54,052	0	54,052
Total	**9,479,273**	**2,767,782**	**12,247,055**
American Samoa	758	0	758
Guam	4,601	0	4,601
North Marianas	318	0	318
Puerto Rico	56,438	99,479	155,917
Trust Territories, Pacific Islands	724	0	724
Virgin Islands	2,572	0	2,572

* New institutions not yet classified

SOURCE: U.S. DEPARTMENT OF EDUCATION, CENTER FOR STATISTICS

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